

WHAT IS CLAIMED IS:

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1. A method of transmitting a plurality of data packets from a server computer to at least one client computer, the method comprising:
determining one or more system conditions of the server computer; and
modifying a process of transmitting the data packets from the server computer to the client computer, the modifying based at least in part upon the determined system conditions.
2. The method of Claim 1, wherein determining one or more system conditions comprises determining a server load that is associated with the server computer.
3. The method of Claim 2, wherein determining the server load comprises comparing the number of data packets that are overdue to the total number of data packets.
4. The method of Claim 2, wherein determining the server load comprises comparing the number of network events processed by a server program that is executing on the server computer due to exceeding a time out threshold to the total number of network events that the server program processes.
5. The method of Claim 4, wherein the network events are selected from the group comprising: a play command, a pause command, a seek command, a ping command, and a re-send command.
6. The method of Claim 2, wherein the server load is based at least in part upon the actual transmission rate between the server computer and the client computer.
7. The method of Claim 1, wherein modifying the process of transmitting the streamable data objects from the server computer to the client computer comprises aggregating one or more data packets into an aggregated data packet.

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8. The method of Claim 7, wherein the data packets are not aggregated larger than the size of a maximum transmission unit for any intermediary network device that is in the transmission path between the server computer and the client computer.

9. The method of Claim 7, wherein the data packets are aggregated in an aggregated data packet until the size of the aggregated data packet exceeds a minimum threshold without exceeding a maximum threshold.

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10. The method of Claim 9, wherein the size of the minimum threshold or the maximum threshold is dependent on the load of the server computer.

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11. The method of Claim 10, wherein the minimum threshold is about 200 bytes and wherein the maximum threshold is about 300 bytes.

12. The method of Claim 10, wherein the minimum threshold is about 700 bytes and wherein the maximum threshold is about 1000 bytes.

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13. The method of Claim 10, wherein the minimum threshold is about 1000 bytes and wherein the maximum threshold is about 1350 bytes.

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14. The method of Claim 1, wherein modifying the process of transmitting the streamable data objects from the server computer to the client computer comprises increasing the packet size of one or more data packets that are used to transmit the streamable data objects.

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15. The method of Claim 1, wherein modifying the process of transmitting the streamable data objects from the server computer to the client computer comprises increasing or decreasing the number of channels that are used to transmit the streamable data objects.

16. The method of Claim 1, wherein modifying the process of transmitting the streamable data objects from the server computer to the client computer comprises

either increasing or decreasing the frequency of transmission of one or more data packets that are used to transmit the streamable data objects.

5 17. A server computer for transmitting data packets, the server computer comprising:

a plurality of data packets; and

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10 a server program for determining one or more system conditions and for modifying a process of transmitting the data packets from the server computer to a client computer, the modifying based at least in part upon the determined system conditions.

18. The system of Claim 17, wherein the data packets collectively comprise a streamable data object.

15 19. The system of Claim 17, wherein determining one or more of the system conditions comprises determining a server load that is associated with the server computer.
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20 20. The system of Claim 19, wherein determining the server load comprises comparing the number of data packets that are overdue to the total number of data packets.

25 21. The system of Claim 19, wherein determining the server load comprises comparing the number of network events processed by a server program that is executing on the server computer due to exceeding a time out threshold to the total number of network events that the server program processes.

30 22. The system of Claim 17, wherein the one or more network events is selected from the group comprising: a play command, a pause command, a seek command, a ping command, and a re-send command.

23. The system of Claim 17, wherein modifying the process of transmitting the streamable data objects from the server computer to the client computer comprises increasing the packet size of one or more data packets.

5 24. The system of Claim 17, wherein modifying the process of transmitting the streamable data objects from the server computer to the client computer comprises increasing the number of channels that are used to transmit the streamable data objects.

10 25. The system of Claim 17, wherein modifying the process of transmitting the streamable data objects from the server computer to the client computer comprises either increasing or decreasing the frequency of transmission of one or more data packets.

15 26. A system for transmitting data packets from a server computer to at least one client computer, the system comprising:

means for determining one or more system conditions; and

means for modifying a process of transmitting the data packets from the server computer to the client computer, the modifying based at least in part upon the determined system conditions.

20 27. The system of Claim 26, wherein the means of determining one or more system conditions comprises means for determining a server load that is associated with the server computer.

25 28. A system for aggregating data packets, the system comprising:
a plurality of data packets that collectively comprise one or more streamable data objects; and

a server computer operably connected to a client computer via a network, the server computer transmitting the data objects to the server computer, the server computer periodically determining, based upon the load of the server computer, whether to aggregate one or more of the data packets into an aggregated data packet.

29. The system of Claim 28, wherein determining the server load comprises comparing the number of data packets that are overdue to the total number of data packets

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30. The system of Claim 28, wherein determining the server load comprises comparing the number of network events processed by a server program that is executing on the server computer due to exceeding a time out threshold to the total number of network events that the server program processes.

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31. The system of Claim 30, wherein the network events are selected from the group comprising: a play command, a pause command, a seek command, a ping command, and a re-send command.

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32. The system of Claim 28, wherein the server load is based at least in part upon the actual transmission rate between the server computer and the client computer.

33. The method of Claim 28, wherein the data packets are not aggregated larger than the size of a maximum transmission unit for any intermediary network device that is in the transmission path between the server computer and the client computer.

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34. The method of Claim 28, wherein the data packets are aggregated in an aggregated data packet until the size of the aggregated data packet exceeds a minimum threshold without exceeding a maximum threshold.

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35. The method of Claim 34, wherein the size of the minimum threshold relates to a quality of presentation of the streamable data objects and the maximum threshold relates to a maximum transmission unit.

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36. The method of Claim 34, wherein the size of the minimum threshold or the maximum threshold is dependent on the load of the server computer.

37. The system of Claim 36, wherein the minimum threshold is about 200 bytes and wherein the maximum threshold is about 300 bytes.

5 38. The system of Claim 36, wherein the minimum threshold is about 700 bytes and wherein the maximum threshold is about 1000 bytes.

39. The system of Claim 36, wherein the minimum threshold is about 1000 bytes and wherein the maximum threshold is about 1350 bytes.

10 40. A method of aggregating data packets, the method comprising:
determining, based upon the load of a server computer, whether to
aggregate one or more of the data packets into an aggregated data packet; and
transmitting the aggregated data packet to a client computer.

15 41. The method of Claim 40, wherein the data packets are not aggregated in an aggregated data packet larger than the size of a maximum transmission unit for any intermediary network device that is in the transmission path between the server computer and the client computer.

20 42. The method of Claim 40, wherein determining the server load comprises comparing the number of data packets that are overdue to the total number of data packets.

25 43. The method of Claim 40, wherein determining the server load comprises comparing the number of network events processed by a server program that is executing on the server computer due to exceeding a time out threshold to the total number of network events that the server program processes.

30 44. The method of Claim 40, wherein the network events are selected from the group comprising: a play command, a pause command, a seek command, a ping command, and a re-send command.

45. The method of Claim 40, wherein the server load is based at least in part upon the actual transmission rate between the server computer and the client computer.

5 46. The method of Claim 40, wherein the data packets are aggregated in an aggregated data packet until the size of the aggregated data packet exceeds a minimum threshold without exceeding a maximum threshold.

47. The method of Claim 46, wherein the size of the minimum threshold or the maximum threshold is dependent on the load of the server computer.

48. The method of Claim 47, wherein the minimum threshold is about 200 bytes and wherein the maximum threshold is about 300 bytes.

15 49. The method of Claim 47, wherein the minimum threshold is about 700 bytes and wherein the maximum threshold is about 1000 bytes.

50. The method of Claim 47, wherein the minimum threshold is about 1000 bytes and wherein the maximum threshold is about 1350 bytes.

20 51. The method of Claim 46, wherein the size of the minimum threshold relates to a quality of presentation of the streamable data objects and the maximum threshold relates to a maximum transmission unit.